

Work Order ID 68488-1

Thursday, April 14, 2011 10:12:48 AM



Page 1

Item ID: D3319-3

Accept



Setup Start



Revision ID:

Item Name: Wearplate

Stop



Start Date: 4/14/2011 Start Qty: 8.00



Cust Item ID:

Required Date: 4/21/2011 Req'd Qty: 8.00



Customer:

Reference:

Approvals: Process Plan:

Date: 4/14/11

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3319

Rev B

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3319
Deburr if necessary

Dwg Rev: B

Prog Rev: B

1010 000

B11-4-18

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

B11-4-18

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

5/10/11

28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC: _____

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130



Small Fab

Small Fab

0.00

Memo

0.00

Small Fab

Deburr if necessary

n/a

140



Brake NC

NC BRAKE

0.00

Memo

0.00

Brake NC

Form using DT8326 & DT8261 as per Dwg D3319Rev:

B 5/10/10

8

150



QC

QC6- Inspect dimensions to drawing

0.00

Memo

0.00

Quality Control

5/10/10

(X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Customer:

Reference:

Run Start



Approvals: Process Plan: Date:

Tooling: Date:

QC: Date:

SPC (Y/N): Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

0.00



Large Fab

Large Fab

Memo

0.00

Large Fab

Weld hard surface using D3319-3T2 per QSI 004 and Dwg D3319 Rev:

Qty Part Number Description Batch A/R

N/A

7560 Hardcoat Rod

1117137

EL 11-5-3 (13)

170

0.00



QC10- Inspect visual per QSI004- ground welds

QC

Memo

0.00

Quality Control

8/11/05/03

180

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

8/11/05/03

(13)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Page 4

Item ID: D3319-3

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Required Date: 4/21/2011 Req'd Qty: 8.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

190

Grey Sandtex(Ref 4.3 5.6) per QSI005 4.3

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME:

12:00

OVEN TEMPERATURE:

12:30

FINISH TIME:

3200 F

(3X) ~~11~~ 11/05/06

200

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

11 05 06

210

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify on inside surface using a permanent fine point marker with the following: TCCA-PDA, Dart Aerospace Ltd., P/N: D3319-3, B/N: BXXXXX For Product Eligibility see PDA05-18 and Stock Location: 497

11/05/06 (3)

W/O:		WORK ORDER CHANGES					
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Page 5

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Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	-----------	------------	------------	---------------	-------------

220

QC21 - Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/5/09

11-05-09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

Picklist Print

Thursday, April 14, 2011 10:12:55 AM

Page 1

Work Order ID: 68488

Parent Item: D3319-3

Parent Item Name: Wearplate



Start Date: 4/14/2011

Required Date: 4/21/2011

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP: A05.05.12 New issue KJ/JLM
IPP Rev: B Now on Waterjet 06-10-03 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MI010S18GA		Purchased	No			100	sf	62.5000	3.2524	27.38863			



1010/1025 SHEET .048



FB 11-4-18

Location

Loc Qty

Loc Code

MAT019

62.5

116268

62.5

116268

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	68488
Description: Wearplate		Part Number:	D3319-3
Inspection Dwg: D3319	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
75.52	+/-0.030	75.52	✓		T 1801	
74.420	+/-0.010	74.420	✓		T	
62.770	+/-0.010	62.770	✓		T	
52.890	+/-0.010	52.890	✓		T	
30.790	+/-0.010	30.790	✓		T	
8.690	+/-0.010	8.690	✓		T	
0.60	+/-0.030	.594	✓		V 1802	
2.690	+/-0.010	2.697	✓		V	
2.940	+/-0.010	2.949	✓		V	
3.527	+/-0.010	3.525	✓		V	
4.518	+/-0.010	4.515	✓		V	
Ø0.190	+0.005/-0.001	.192	✓		V	
2.940	+/-0.010	2.950	✓		V	
2.940	+/-0.010	2.947	✓		V	
2.690	+/-0.010	2.697	✓		V	
5.063	+/-0.010	5.060	✓		V	
6.163	+/-0.010	6.162	✓		V	
Ø0.316 x 0.607	+0.006/-0.001 x +/-0.010	316 x .609	✓		V	
0.048	+/-0.010	.045	✓		V	

Measured by: <u>B</u>	Audited by: <u>[Signature]</u>	Prototype Approval:	N/A
Date: <u>11-4-18</u>	Date: <u>11/6/19</u>	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.07.18	New Issue	KJ/JLM <u>[Signature]</u>	<u>[Signature]</u>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

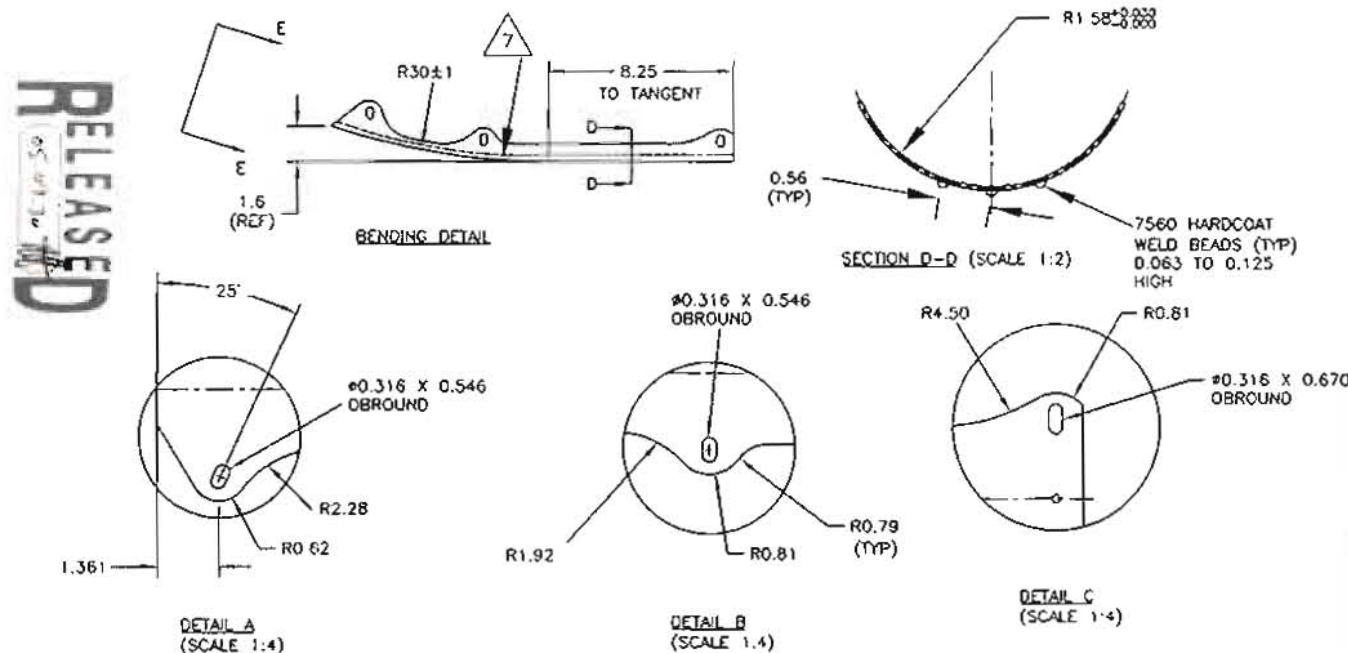
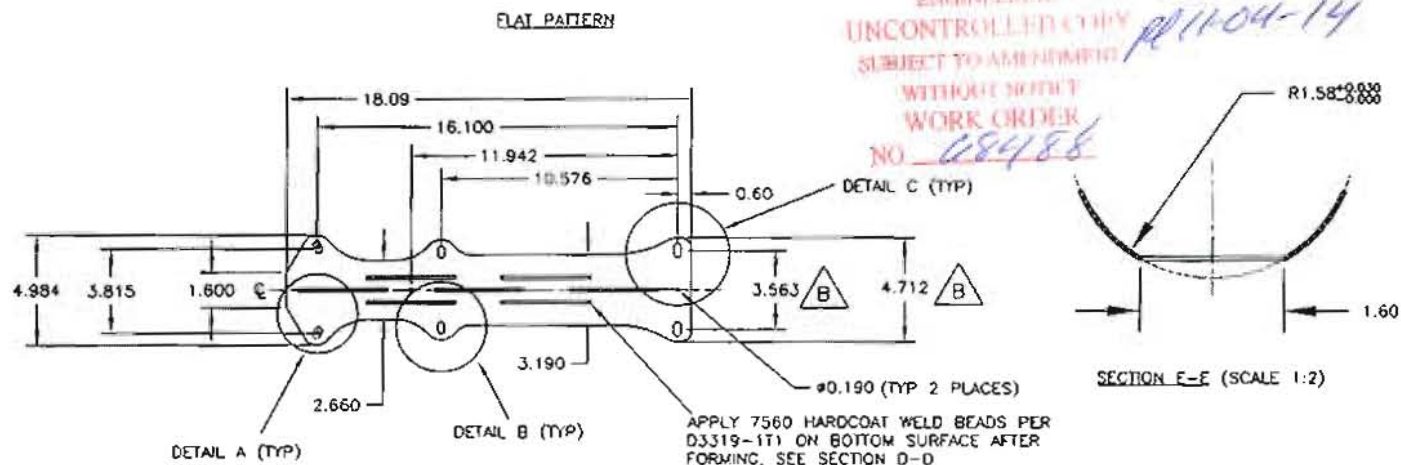
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 08488

DART



D3319-1 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA C40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-1 B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18"

DESIGN	DRAWN BY	DART AEROSPACE LTD
P1	P1	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
		D3319
DATE	TITLE	REV. B
05.06.06	WEARPLATE	SHEET 1 OF 5
		SCALE
		1:8
A	04.09.24	NEW ISSUE
B	05.06.06	WIDEN HOLES, REDUCE WIDTH -3/-5/-7

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RELEASED

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

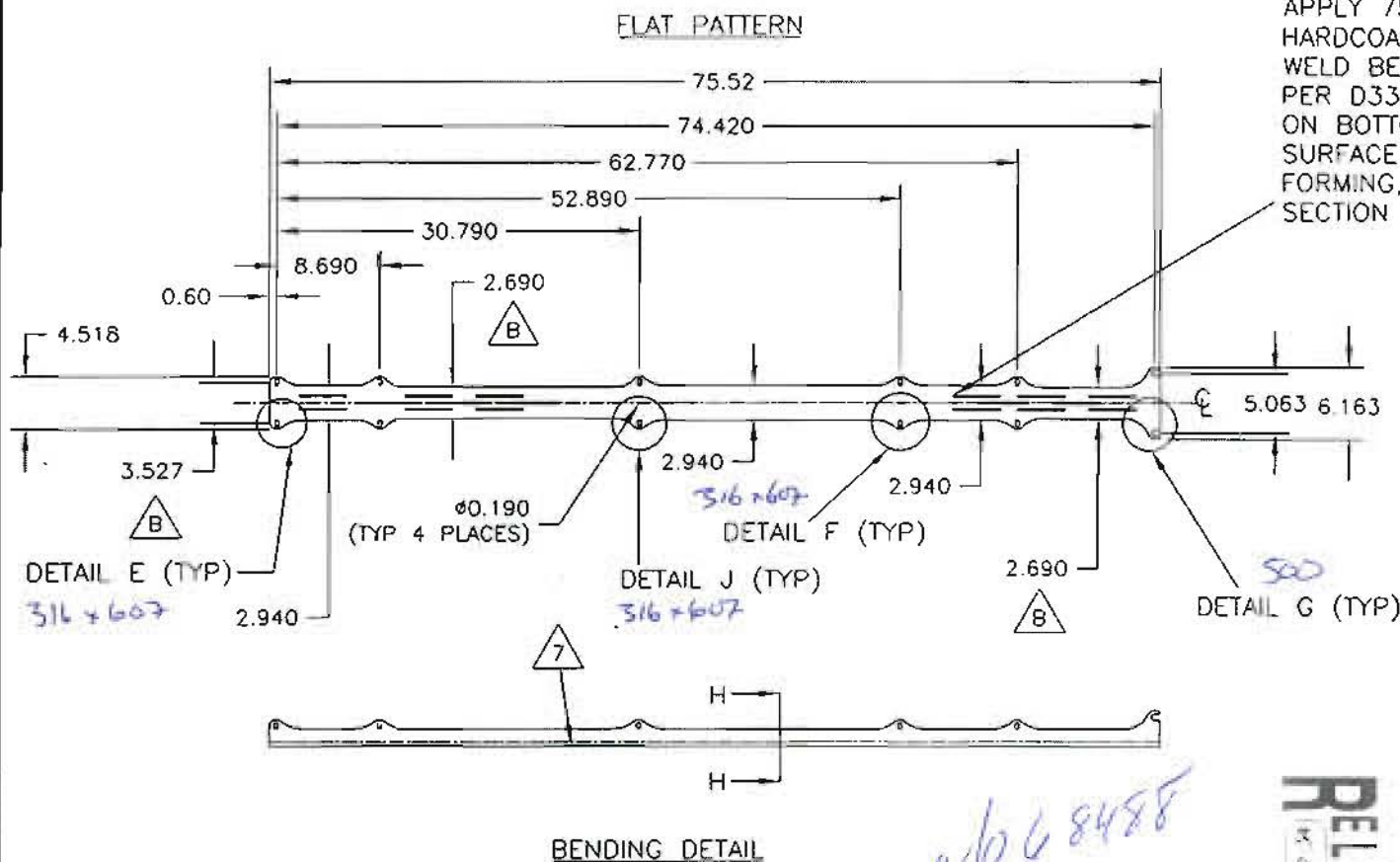
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD
CHECKED	APPROVED	HAMKESBURY, ONTARIO, CANADA
DATE	TITLE	REV. B
05.06.06	WEARPLATE	SHEET 2 OF 3
		SCALE 1:15

APPLY 7560
HARDCOAT
WELD BEADS
PER D3319-3T1
ON BOTTOM
SURFACE AFTER
FORMING, SEE
SECTION H-H



D3319-3 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-3 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

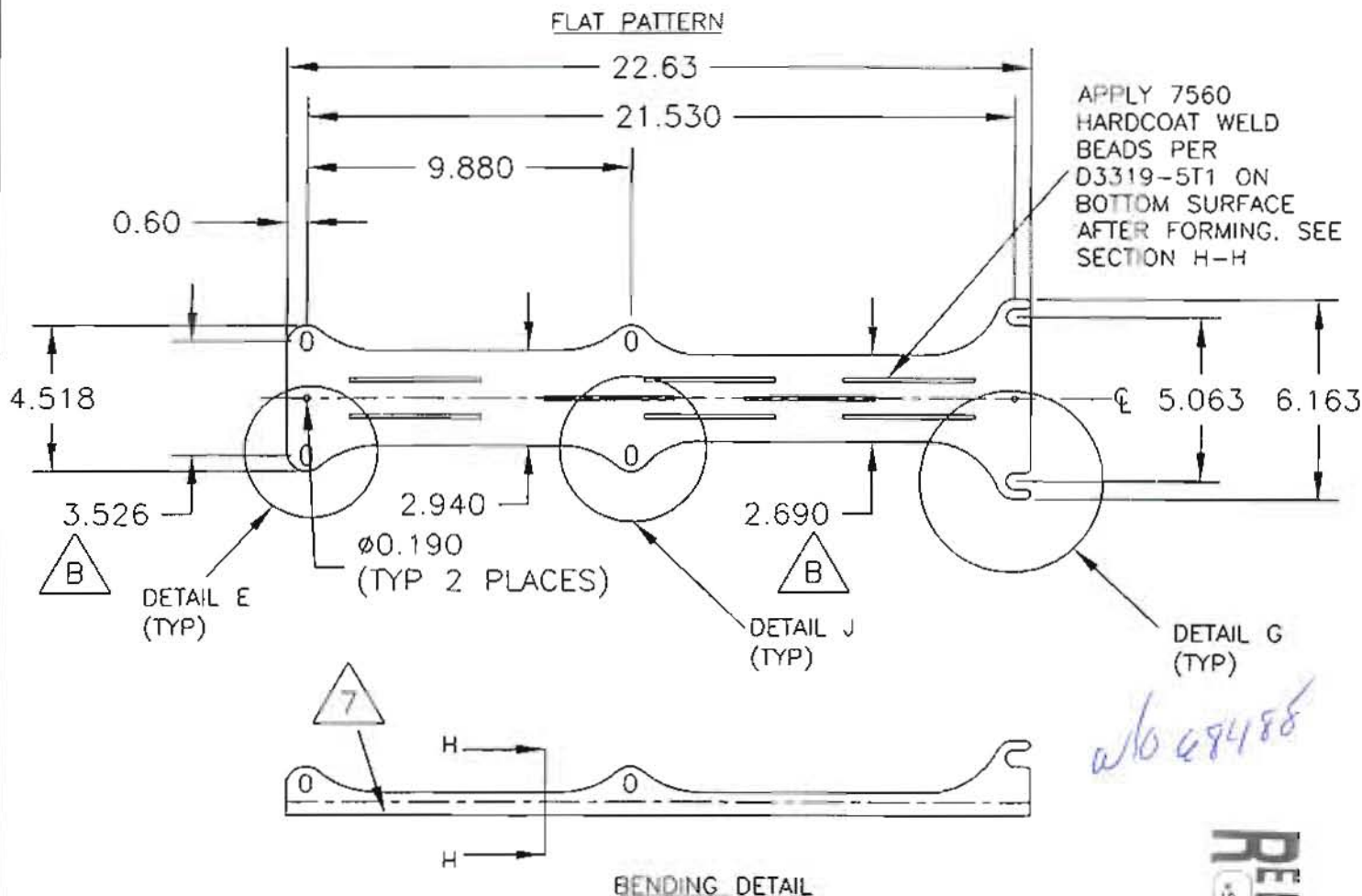
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN	041	DRAWN BY	041	DART AEROSPACE LTD
CHECKED		APPROVED		HAWKSBURY, ONTARIO, CANADA
DATE	05.06.06	TITLE	D3319	REV. B
			WEARPLATE	SHEET 3 OF 5
				SCALE 1:5



D3319-5 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA C40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4 3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-5 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

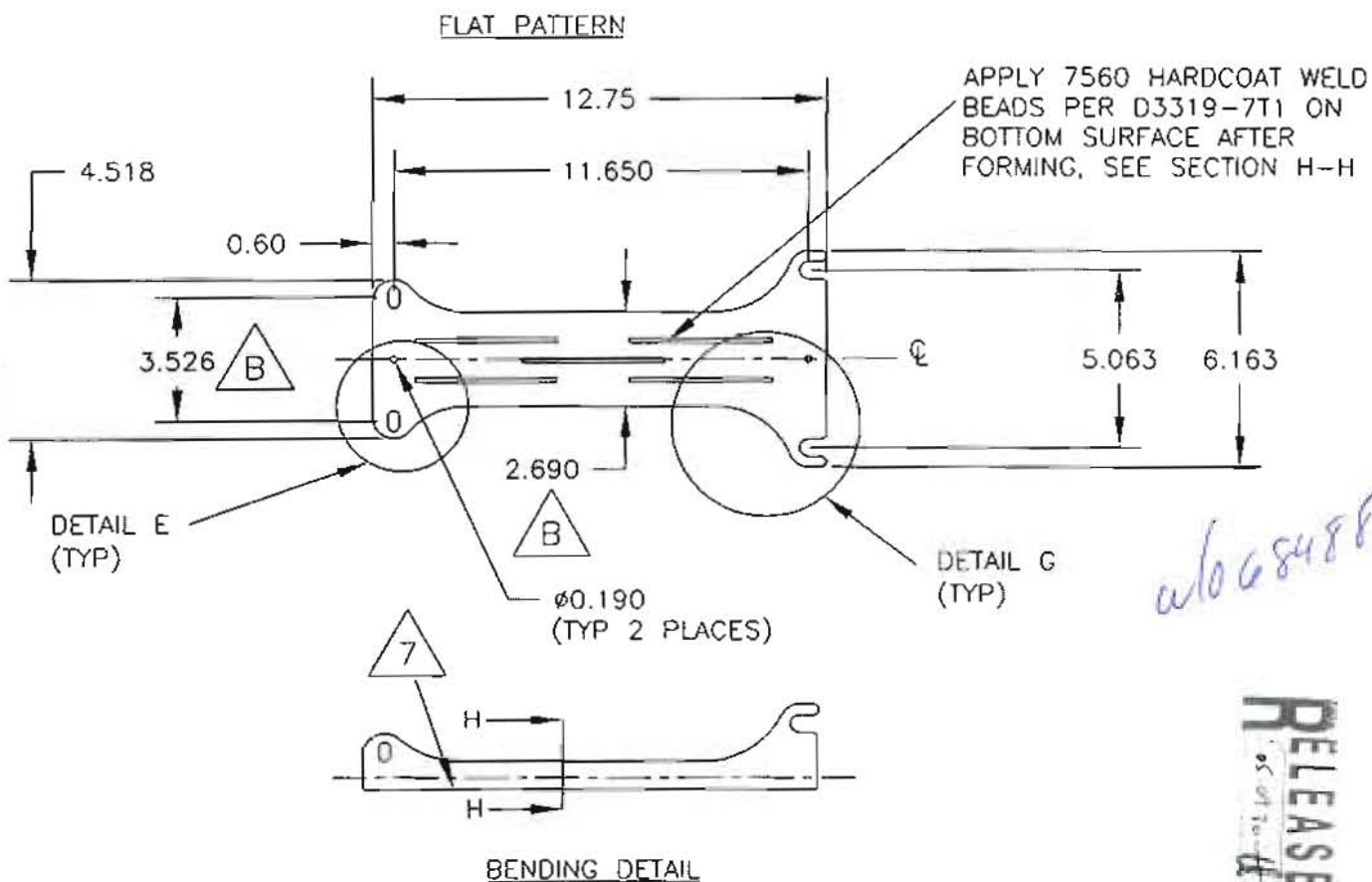
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
PH	PH	DRAWING NO.	REV. B
CHECKED	APPROVED	D3319	SHEET 4 OF 5
DATE		TITLE	SCALE
05.06.06		WEARPLATE	1:5

RELEASED
05 of 70-4



D3319-7 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21,
38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-7 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

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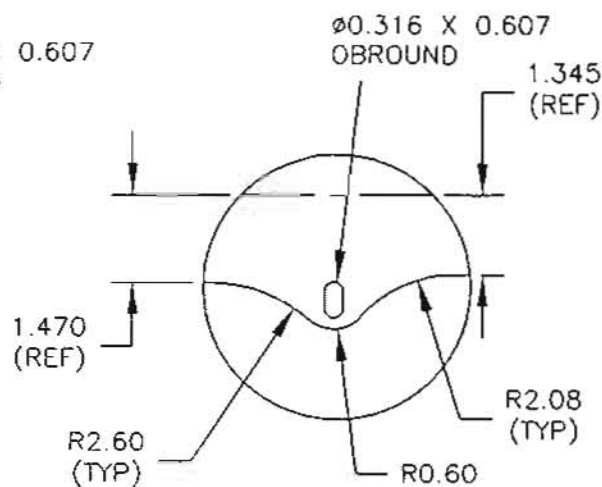
NOTE: Date & initial all entries

DART

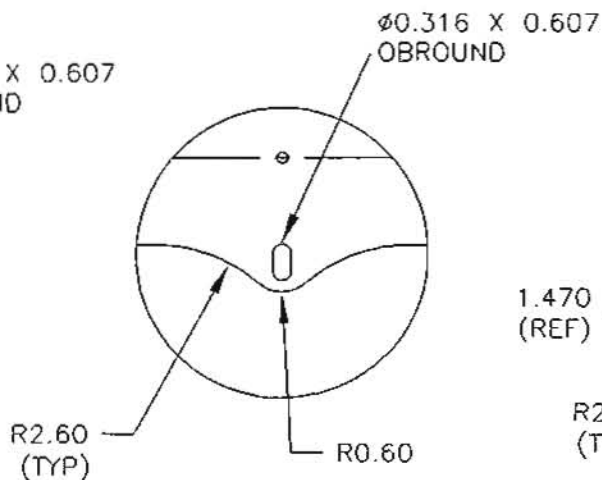
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CHECKED		APPROVED		HAMKESBURY, ONTARIO, CANADA
DATE	05.06.06	DRAWING NO.	D3319	REV. B
		TITLE	WEARPLATE	SHEET 5 OF 5
		SCALE	1:3	

RELEASED
05 01 2011

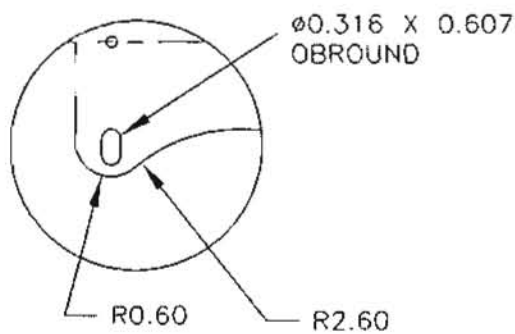
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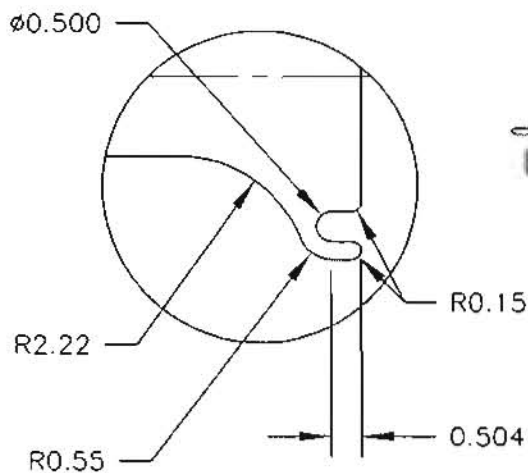
DETAIL J



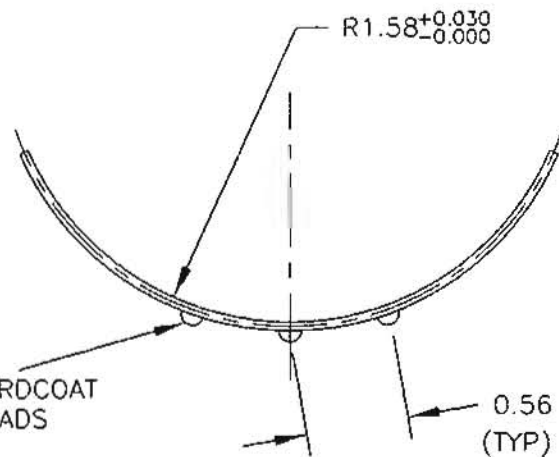
DETAIL F



DETAIL E



DETAIL G



SECTION H-H
(SCALE 1:1)

7560 HARDCOAT
WELD BEADS
(TYP)
0.063 TO 0.125
HIGH

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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